

Appl. No. 09/865,295  
Amd. Dated March 3, 2005  
Reply to Office Action of December 13, 2004

### REMARKS/ARGUMENTS

Reconsideration of the present amendment, as amended, is respectfully requested.

Of previously pending claims 1-25, all were rejected. Claims 1-6, 17, 22 and 23 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,436,750, which issued July 25, 1995 to T. Kawano. Claims 11-13, 16, and 21 were rejected under 35 U.S.C. §103(a) as being obvious over the cited Kawano patent. Claims 7-10, 14, 15, and 18-20 were rejected under 35 U.S.C. §103(a) as being obvious over the cited Kawano patent in view of U.S. Patent No. 6,204,959, which issued March 20, 2001 to M. Fujita *et al.* Claims 24 and 25 were rejected under 35 U.S.C. §103(a) as being obvious over the cited Kawano patent in view of U.S. Patent No. 6,515,967, which issued February 4, 2003 to L.M. Wei *et al.* Applicants have amended claims 22-25.

The applicants respectfully disagree with the rejection of claims 1-6, 17, 22 and 23 on grounds of anticipation by the cited Kawano patent and make their arguments with respect to independent claims 1, 6, 17, 22 and 23. In rejecting independent claim 1, the Examiner stated:

...Kawano discloses optical repeater transmission system comprising:

...

performing error correction decoding on said first measurement electrical signal to generate an indication of correct receipt of data at said first intermediate location (the circuitries in the repeater system decode the measured signal and obtained the indication of correct receipt of data which is the supervisory signal; based on the reception of such signal, failure occurrence can be determined; see col. 2 lines 37-55 and col. 4, lines 10-15).

With due respect to the Examiner, the Kawano patent does not disclose error correction decoding as called for in the applicants' claim. As cited by the Examiner, Kawano teaches, "The repeater station constantly monitors the supervisory signal. If the supervisory signal is lost, the repeater recognizes that a failure has occurred in the transmission channel and modulates the excitation energy...." Col. 2, lines 37-41. The determination of the presence or absence of a

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signal is not "decoding," much less "error correction decoding." Furthermore, decoding implies the existence of encoding and the applicants have been unable to determine where what encoding is performed in the Kawano system. Hence claim 1 is not anticipated by the Kawano patent and should be allowed. Similarly, independent apparatus claim 6 has language of "an error correction decoding circuit" and should also be allowed by the arguments above.

Independent claim 17 calls for "means for recovering data based on said portion of said optical signal." The Examiner, in rejecting this claim, found in the Kawano patent that "the repeater system, for example R1, recover the detected optical signal." The applicants disagree. The repeater stations of the Kawano system determine whether the data signal  $f_d$  is lost when the accompanying supervisory signal is determined to be lost. "The presence of the supervisory signal indicated that there is no failure in the system. Each of the repeater stations R1-Rn includes an oscillator for generating a fault-point indicating signal of particular signal which is uniquely assigned to the repeater station." Col. 4, lines 4-9. However, the applicants have not found that data is recovered in the teachings of the Kawano patent. Furthermore, the claim calls for the recovery of data "based on said portion of said optical signal," i.e., the separated portion of the optical signal traveling along an optical communications link. From the applicants' reading of the Kawano patent, there is no description of how any information in the data signal illustrated by Fig. 4A which is lost is reassembled or recovered in any way, much less reassembled or recovered from the optical splitter 32 and output of the photodiode 33 of Fig. 5 of Kawano. Hence claim 17 is not anticipated by the Kawano patent and should be allowed.

The rejection of independent claims 22 and 23 was based on the reasoning that, "...the repeater unit receives indication of fault such as the presence of supervisory signal and location of fault indicated by repeater unique identification." Both claims were amended to read, "receiving indications of whether a data optical signal is received successfully from a plurality of monitor locations along an optical link...(underlining added)." As pointed out above and as noted by the Examiner, the Kawano system operates by the reception of the supervisory signal at the repeater stations R1-Rn, and not the data signal ( $f_d$ ). Hence claims 22 and 23 are not anticipated by the Kawano patent and should be allowed.

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With respect to the balance of the independent claims, claims 12, 24 and 25, claim 12 was rejected for being obvious over the previously cited Kawano patent. Claim 12 recites, "...wherein each of said first link monitor and said second link monitor comprise: a coupler that separates a portion of an optical signal traveling along said link; an optical receiver that recovers data based on said portion of said optical signal; an error correction decoding circuit that identifies errors in receipt of said data; and a link verification stage that generates an indication of link operation based on errors detected by said error correction decoding circuit."

Claim 12 should not be rejected for several reasons, among which include the observation that there is no "an optical receiver that recovers data based on said portion of said optical signal" described in the Kawano patent. As pointed out previously, data is not recovered in the Kawano system. Secondly, there is no error correction decoding (nor error correction encoding) circuit in the Kawano patent either. As argued with respect to claim 1, the determination of the existence of the supervisory signal as described in the Kawano patent is not decoding, nor does the Kawano system correct any errors. There is no error correction decoding circuit, as called for in the claim. Hence claim 12 is not obvious over the Kawano patent and should be allowable.

Finally, independent claims 24 and 25 were rejected for obviousness over the combination of the Kawano and Wei patents. To better point out their invention, the applicants have amended both claims to read, "code that causes reception of indications of whether a data optical signal is received successfully from a plurality of monitor locations along an optical link...(underlining added)." As argued previously, the Kawano system operates by the reception of the supervisory signal at the repeater stations R1-Rn, and not the data signal ( $f_s$ ). Hence claims 24 and 25 are not obvious over the combination of the Kawano and Wei patents and should be allowed..

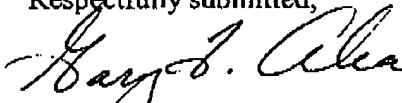
In summary, independent claims 1, 6, 12, 17, and 22-25 are all allowable. Dependent claims 2-5, 7-11, 13-16, and 18-21 should also be allowable for at least being dependent upon allowable base claims.

Therefore, in view of the amendments above and the remarks directed thereto, the applicants request that all rejections be removed, that claims 1-25 be allowed, and the case be

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passed to issue. If a telephone conference would in any way expedite the prosecution of the application, the Examiner is asked to call the undersigned at (408) 446-7687.

Respectfully submitted,



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